

REMARKS

Reconsideration and allowable of the present application are respectfully requested.

Claim 1 has been amended as supported in the present specification, including at page 8, lines 15-27 and Figure 1 and Figure 6. The amendment clarifies that the fine hollow powder comprises a titanium oxide shell with laminated particles stuck together.

Initially, the applicants note at page 1 of the Office Action, that the applicants submission of certified copies of the priority documents has not been acknowledged. The applicants submitted certified copies of the priority documents during the International Stage of the present application. Please see the bottom of page 2, items 7.a. and 7.b. of the Request for Filing National Phase of PCT Application, submitted to the U.S. Patent and Trademark Office (PTO) on February 29, 2000, which states the foregoing and shows the applicants submission of Form PCT/IB/304, indicating the submission of the certified copies of the priority documents. The applicants again submit a copy of PCT/IB/304 with this Amendment (attached hereto) and ask the Examiner to acknowledge receipt of the certified copies of the priority documents during the International Stage.

The applicants respectfully traverse the rejection of claims 1-3 and 16-19 under 35 USC 102(b) in view of Sowman.

The applicants traverse the rejection of claims 20-22 under 35 USC 102(b) or in the alternative, under 35 USC 103(a) in view of Sowman.

The applicants traverse the rejection of claims 4-6, 8-12 and 14 under 35 USC 103(a) in view of Sowman.

This reference does not anticipate the presently claimed invention or make it obvious.

As described in the specification, an important purpose of the presently claimed invention is to provide a fine hollow powder comprising a titanium oxide shell having an improved dispersibility (see page 3, lines 11-15 of specification). Such purpose is attained by the use of a fine hollow powder comprising a titanium oxide shell with laminated particles stuck together (see amended claim 1). This special form is obtained by the use of exfoliated titania sol as a raw material of the spray drying process; that is, the hollow form obtained by the spray drying process (see page 10, line 23 to page 11, line 23 of specification).

The applicants emphasize that the titania sol which is used in the present invention has a flaky form. In the present specification, the titania sol having the flaky form is expressed as “exfoliated titania sol”. This exfoliated titania sol is prepared by the delamination of the layered titanate compound (see page 10, line 23 to page 13, line 10, and Figure 1 of specification). The hollow titanium oxide having a very special form of the presently claimed invention is prepared by the use of this exfoliated titania sol.

Referring to the present Office Action, the applicants note that the Office Action states that “Sowman teaches hollow particles comprising titania shell...” However, Sowman does not disclose or suggest the presently claimed invention as for example recited in presently amended claim 1, i.e., “A fine hollow powder comprising a titanium oxide shell with laminated titanium oxide particles stuck together.”

For example, please refer to column 1, line 68 to column 2, line 4 of Sowman, which states that the wall of microcapsule is homogeneous. Further, according to

column 1, lines 33-50 (claim 6) of Sowman, smooth-surfaced microcapsule is disclosed.

According to the method of Sowman, spherical microcapsules shown in Figure 1 are provided by forming a dispersion of droplets of the sol, then gelling the sol by forming three-dimensional network while maintaining its droplets shape (see claim 1 of Sowman). Therefore, these microcapsules do not have the wall with laminated particles stuck together, as in the presently claimed invention.

Additionally, please note that in the method used in the Examples of Sowman, tetraisopropyl titanate was added to concentrated hydrochloric acid then hydrolyzed. According to this method, only spherical titanium dioxide sol was produced. Thus, “a fine hollow powder comprising a titanium oxide shell with laminated titanium oxide particles stuck together” (presently amended claim 1) is not obtained.

The applicants submit that the presently claimed invention is nowhere disclosed, suggested or made obvious by the teachings of Sowman. The presently claimed invention is not only allowable under Section 102(b) but is also allowable under Section 103(a) in view of the cited art.

The applicants respectfully traverse the rejection of claims 7, 13 and 15 under 35 USC 102(b) in view of the specification of the present application. The present disclosure does not anticipate the presently claimed invention or make it obvious.

With reference to claims 7, 13 and 15, the Examiner is asked observe the specifically recited chemical formulae of these claims. The recited chemical formulae of claims 7, 13 and 15 are not disclosed as being known. Please refer to page 13, lines 11-28 (claim 7), page 14 line 12 to page 15, line 7 (claim 13) and page 19, line 2 to page 21, line 7 (claim 15) of the present specification.

The applicants submit that the presently claimed invention is nowhere disclosed, suggested or made obvious by the disclosure of the present specification. The presently claimed invention is fully allowable in view of the present specification.

The applicants respectfully traverse the rejection of claims 1-3 under 35 USC 102(e) in view of Tani et al.

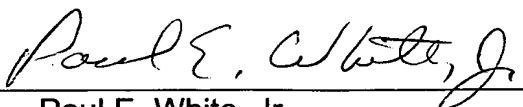
This reference does not anticipate the presently claimed invention or make it obvious.

However, the applicants point out that Tani et al. (USP 6,004,525) has a filing date of October 5, 1998, while the PCT application (PCT/JP98/03918) from which the present application entered the National Phase, has an international filing date of September 2, 1998. The PCT filing date for the present application precedes the filing date of Tani et al. Thus, the reference of Tani et al. has been inappropriately cited and should accordingly be withdrawn.

In view of the above and the attached copy of Form PCT/IB/304, it is believed that this application is in condition for allowance and a Notice to that effect is respectfully requested..

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Proposed Amendments To Claim 1 Showing Deletions And Insertions.

Claim 1. (Amended) A fine hollow powder comprising a titanium oxide shell
with laminated titanium oxide particles stuck together.

COPY OF PCT/IB/304